

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

OFFICE OF DESIGN POLICY & SUPPORT INTERDEPARTMENTAL CORRESPONDENCE

FILE P.I. # 0013746
Habersham County
GDOT District 1 - Gainesville
SR 385 @ Hazel Creek in Demorest

OFFICE Design Policy & Support

DATE 10/10/2017

FROM  Brent Story, State Design Policy Engineer

TO SEE DISTRIBUTION

SUBJECT APPROVED CONCEPT REPORT

Attached is the approved Concept Report for the above subject project.

Attachment

DISTRIBUTION:

Hiral Patel, Director of Engineering
Joe Carpenter, Director of P3
Albert Shelby, Director of Program Delivery
Darryl VanMeter, Assistant Director of P3/State Innovative Delivery Administrator
Kim Nesbitt, Program Delivery Administrator
Bobby Hilliard, Program Control Administrator
Cindy VanDyke, State Transportation Planning Administrator
Eric Duff, State Environmental Administrator
Bill DuVall, State Bridge Engineer
Andrew Heath, State Traffic Engineer
Angela Robinson, Financial Management Administrator
Lisa Myers, State Project Review Engineer
Monica Flournoy, State Materials and Testing Administrator
Patrick Allen, State Utilities Engineer
Benny Walden, Statewide Location Bureau Chief
Brent Cook, District Engineer
Brandon Kirby, District Preconstruction Engineer
Robby Oliver, District Utilities Engineer
Darrell Richardson, Project Manager
BOARD MEMBER - 9th Congressional District

DEPARTMENT OF TRANSPORTATION

STATE OF GEORGIA

LIMITED SCOPE PROJECT CONCEPT REPORT

Project Type: Bridge Replacement
GDOT District: 1
Federal Route Number: US 441 BUS

P.I. Number: 0013746
County: Habersham
State Route Number: 385

This project consists of a proposed bridge replacement on State Route (SR) 385 / US 441 BUS over Hazel Creek in the City of Demorest and Habersham County.

Submitted for approval:

**** Report was updated to address office head comments**

Gene "Mac" Cranford, III
Gene "Mac" Cranford, III, P.E. RS&H

RS&H

Albert Shelby

6-27-17

Date
7/19/17

State Program Delivery Engineer

Eric Duff
GDOT Project Manager

SHP C.L.B.

Date
6-29-17
Date

*** Recommendations on file**

Recommendation for approval:

* Eric Duff/KLP

State Environmental Administrator

7-21-2017

Date

* Christina Barry/KLP

For State Traffic Engineer

7-27-2017

Date

* Bill DuVall/KLP

State Bridge Engineer

9-11-2017

Date

☐ MPO Area: This project is consistent with the MPO adopted Regional Transportation Plan (RTP)/Long Range Transportation Plan (LRTP).

☒ Rural Area: This project is consistent with the goals outlined in the Statewide Transportation Plan (SWTP) and/or is included in the State Transportation Improvement Program (STIP).

Christina L. Karpke
State Transportation Planning Administrator

7-25-17
Date

Approval:

Concur:

Hiatt Burt
GDOT Director of Engineering

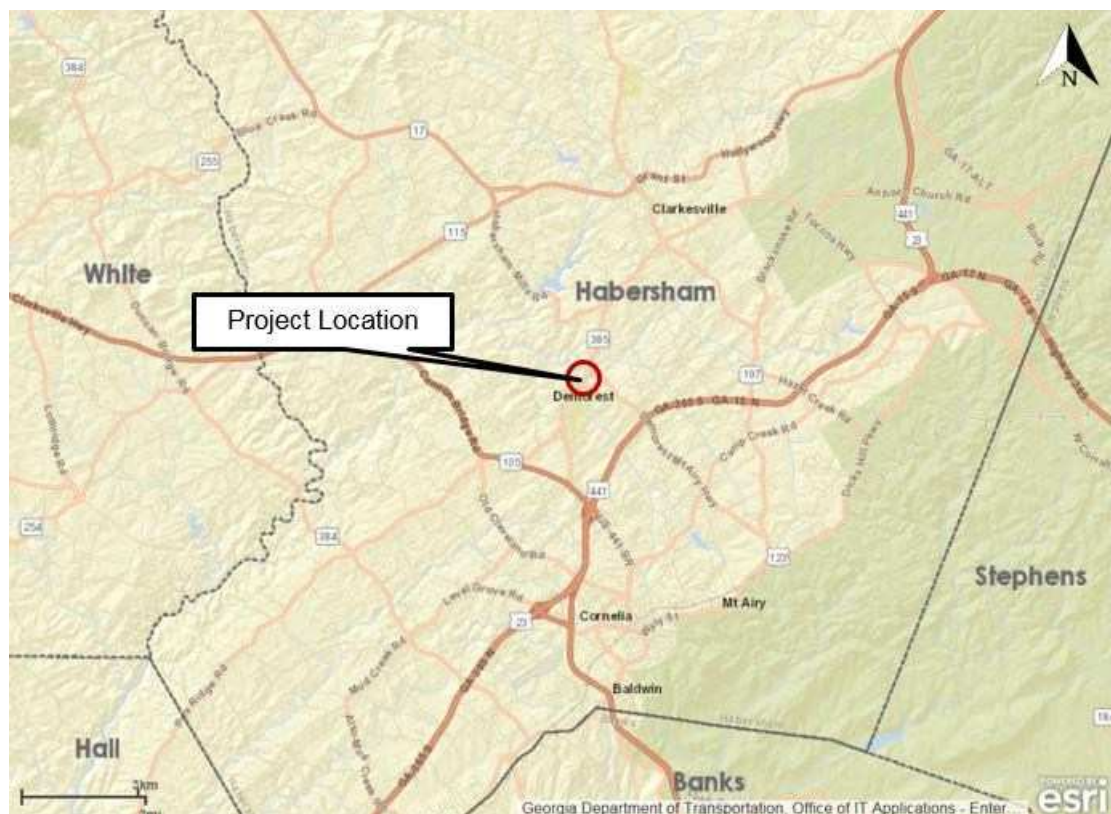
9-22-17
Date

Approve:

Margaret B. Pirelo
GDOT Chief Engineer

9/22/17
Date

PROJECT LOCATION MAP



County: Habersham

PLANNING & BACKGROUND DATA

Project Justification Statement: The bridge on State Route (SR) 385/US 441 BUS over Hazel Creek, Structure ID 137-0006-0, was built in 1925 and widened in 1970. The original bridge consists of three spans of concrete arch rings with concrete slabs. The widened section consists of haunched reinforced concrete deck girders (RCDG's) on concrete wall abutments. This bridge was designed using an H-15 vehicle, which is below current design standards. The deck is in satisfactory condition. The superstructure is in fair condition with concrete spalls and minor cracking with efflorescence. The substructure is in fair condition with concrete spalling and deterioration. The bridge is classified as having an unknown foundation and therefore could be at risk for scour. Due to the structural integrity of the bridge pertaining to the design vehicle and the unknown foundation of the substructure, replacement of this bridge is recommended.

Existing conditions: SR 385/US 441 BUS consists of 2-12' lanes with a 14' center left turn lane. The existing urban shoulder includes a 5' sidewalk. The bridge over Hazel Creek was originally built in 1925 and expanded in 1970. There are existing overhead and underground utilities present.

Other projects in the area: PI #0010692 improving pedestrian facilities along SR 385 from CS 621/Alabama St to CS 628/Georgia St

MPO: N/A - not in an MPO

TIP #: N/A

Congressional District(s): 9

Federal Oversight: ☐PoDI ☒Exempt ☐State Funded ☐Other

Projected Traffic: AADT 24 HR T: 3.5%
Current Year (2017): 11,875 Open Year (2022): 12,175 Design Year (2042): 13,400
Traffic Projections Performed by: RS&H
Date approved by the GDOT Office of Planning: May 8, 2017

Functional Classification (Mainline): Urban Collector Street

Complete Streets - Bicycle, Pedestrian, and/or Transit Standards Warrants:

Warrants met: ☐None ☐Bicycle ☒Pedestrian ☐Transit

Pavement Evaluation and Recommendations

Initial Pavement Evaluation Summary Report Required? ☒No ☐Yes
Initial Pavement Type Selection Report Required? ☒No ☐Yes Feasible
Pavement Alternatives: ☒HMA ☐PCC ☐HMA & PCC

DESIGN AND STRUCTURAL

Description of Proposed Project:

The proposed project will replace the existing bridge over Hazel Creek with a bridge that will include 2-12 foot travel lanes, a 14 foot center left turn lane, and 5.5 foot sidewalks. The approaching roadway will include 2-12 foot travel lanes, a 14 foot center left turn lane, and a 12 foot shoulder that will consist of a 2.5 foot curb and gutter, 2 foot grass strip, and a 5 foot sidewalk. The project length is approximately 0.26 miles and has a design speed of 35 mph. Traffic will be maintained on site, and the bridge will be constructed in stages.

County: Habersham

During the first stage of construction, traffic will be maintained on two lanes of the existing bridge while the eastern 16 feet from the 1970 widening are removed. Traffic will then be directed via a 22 foot stage construction bridge, and the remaining structure of the existing bridge will be demolished. In the final stage, the remaining section of the proposed bridge will be built.

Major Structures:

Structure ID	Existing	Proposed
137-0006-0	The existing structure is 165 ft in length, 56.4 ft in width, with two (2) – 12 ft lanes and one 14 ft center left turn lane. The structure has a sufficiency rating of 63.1.	The proposed structure will be approximately 165 ft long by 56 ft (2-12 ft lanes, 1-14 ft center left turn lane, and 5.5 ft sidewalk)

Mainline Design Features: SR 385 Mainline

Feature	Existing	Policy	Proposed
Typical Section			
- Number of Lanes	2		2
- Lane Width(s)	12 ft.	12 ft.	12 ft.
- Median Width & Type	14 ft. Flush	14 ft. Flush	14 ft. Flush
- Border Area Width	10 ft.	12 ft	12 ft
- Outside Shoulder Slope	2%	2%	2%
- Sidewalks	5 ft.	5 ft.	5 ft. - Road, 5.5 ft. - Bridge
- Bike Accommodations	None	None	None
Posted Speed	35 mph		35 mph
Design Speed	35 mph	35 mph	35 mph
Minimum Horizontal Curve Radius	No Curve	371 ft.	3730 ft.
Maximum Superelevation Rate	NC	4 %	NC
Maximum Grade	4 %	10 %	4 %
Access Control	By Permit		By Permit
Design Vehicle	WB-67		WB-67
Pavement Type	HMA		HMA

*According to current GDOT design policy if applicable

Major Interchanges/Intersections: SR 385 @ Demorest Mt Airy HwyLighting required: ☒ No ☐ YesOff-site Detours Anticipated: ☒ No ☐ Undetermined ☐ YesTransportation Management Plan [TMP] Required: ☐ No ☒ YesIf Yes: Project classified as: ☒ Non-SignificantTMP Components Anticipated: ☒ TTCIs the project located on a NHS roadway? ☒ No ☐ Yes

Design Exceptions/Design Variances to FHWA or GDOT Controlling Criteria anticipated: None

Design Variances to GDOT Standard Criteria anticipated: None

UTILITY AND PROPERTY

Railroad Involvement: None

Utility Involvements: City of Demorest Water & Sewer, Georgia Power - Distribution, Atlanta Gas Light, Habersham EMC, Windstream

SUE Required: ☒ No ☐ Yes

Public Interest Determination Policy and Procedure recommended? ☒ No ☐ Yes

Right-of-Way: Existing width: 60 ft. Proposed width: 100ft.
Required Right-of-Way anticipated: ☐ None ☒ Yes ☐ Undetermined Easements anticipated:
☐ None ☐ Temporary ☒ Permanent ☐ Utility ☐ Other

Anticipated total number of impacted parcels: 15
Displacements anticipated: Businesses: 2
Residences: 0
Other: 0
Total Displacements: 2

Impacts to USACE property anticipated? ☒ No ☐ Yes ☐ Undetermined

Is Federal Aviation Administration (FAA) coordination anticipated? ☒ No ☐ Yes

CONTEXT SENSITIVE SOLUTIONS

Issues of Concern: None

Context Sensitive Solutions Proposed: None

ENVIRONMENTAL AND PERMITS

Anticipated Environmental Document:

NEPA: ☐ PCE ☒ CE ☐ EA-FONSI

GEPA*: ☐ Type A ☐ Type B ☒ None

*A GEPA document must be prepared only for state funded projects where the project cost meets or exceeds \$100 million.

Level of Environmental Analysis:

- ☒ The environmental considerations noted below are based on preliminary desktop or screening level environmental analysis and are subject to revision after the completion of resource identification, delineation, and agency concurrence.
- ☐ The environmental considerations noted below are based on the completion of resource identification, delineation, and agency concurrence.

County: Habersham

MS4 Compliance – Is the project located in an MS4 area? ☒ No☐ Yes**Is Protected Species water quality mitigation anticipated?**☒ No ☐ Yes**Environmental Permits, Variances, Commitments, and Coordination anticipated:**

Buffer variance (50-foot buffer), US Army Corps of Engineers (USACE) Section 404 Permit and NPDES may be required.

Air Quality:

Is the project located in an Ozone Non-attainment area?

☒ No☐ YesCarbon Monoxide hotspot analysis: ☐ Required☒ Not Required☐ TBD**NEPA/GEPA Comments & Information:**

There may be tree-clearing restrictions required in the construction contract for protected bat species.

COORDINATION, ACTIVITIES, RESPONSIBILITIES, AND COSTS**Project Meetings:** Concept Team Meeting held May 31st, 2017. (See attached meeting minutes)

Project Activity	Party Responsible for Performing Task(s)
Concept Development	GDOT/RS&H
Design	GDOT/RS&H
Right-of-Way Acquisition	GDOT
Utility Coordination (Preconstruction)	GDOT
Utility Relocation (Construction)	Utility Owners
Letting to Contract	GDOT
Construction Supervision	GDOT
Providing Material Pits	CONTRACTOR
Providing Detours	CONTRACTOR
Environmental Studies, Documents, & Permits	GDOT/RS&H
Environmental Mitigation	GDOT
Construction Inspection & Materials Testing	GDOT

Other coordination to date: None**Project Cost Estimate and Funding Responsibilities:**

	PE Activities		ROW	Reimbursable Utilities	CST*	Total Cost
	PE Funding	Section 404 Mitigation				
Funded By	GDOT	GDOT	GDOT	GDOT	GDOT	
\$ Amount	\$350,000	\$0	\$1,134,000	\$210,000	\$2,935,088	\$4,629,088
Date of Estimate	12/9/2016		5/19/2017	6/13/2017	9/20/2017	

*CST Cost includes: Construction, Engineering and Inspection, Contingencies and Liquid AC Cost Adjustment.

ALTERNATIVES DISCUSSION

Preferred Alternative: Stage construct proposed bridge to East.			
Estimated Property Impacts:	15	Estimated Total Cost:	\$4,629,088
Estimated ROW Cost:	\$1,134,000	Estimated CST Time:	18 Months
Rationale: Proposed alternative meets project justification while mitigating impacts on traffic and environment.			

Preferred Alternative: This no-build alternative proposed no changes to the existing bridge structure			
Estimated Property Impacts:	0	Estimated Total Cost:	\$0
Estimated ROW Cost:	\$0	Estimated CST Time:	0
Rationale: This alternative does not meet the project justification.			

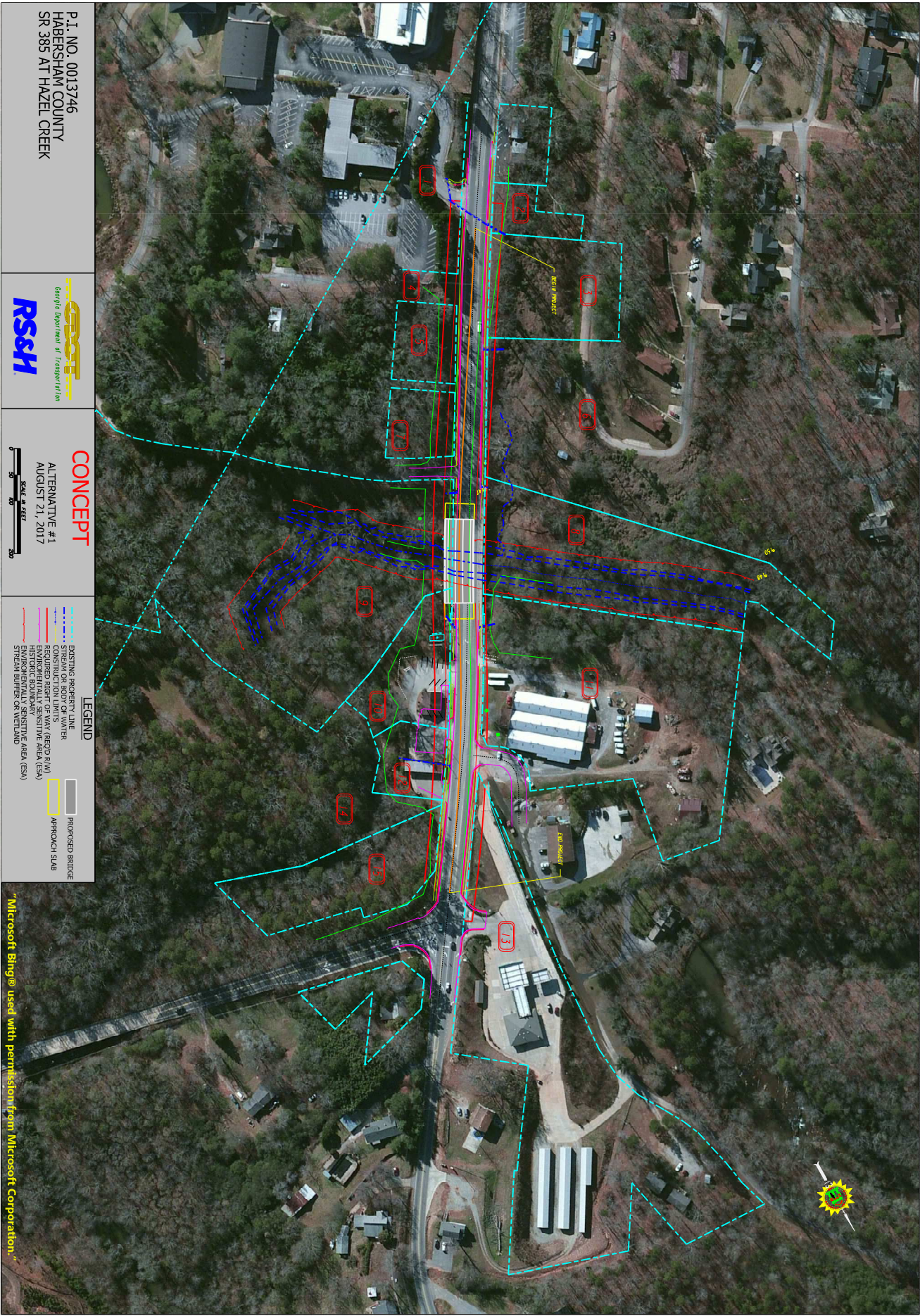
Alternative 1: Closing current bridge to construct proposed bridge in place without staging with off-site detour			
Estimated Property Impacts:	6	Estimated Total Cost:	\$4,300,000
Estimated ROW Cost:	\$568,000	Estimated CST Time:	12 months
Rationale: The proposed detour is not suitable nor accommodating for the current and future traffic in Demorest while undergoing construction.			

Alternative 2: Construct proposed bridge is staged on the other side, west, of the current bridge.			
Estimated Property Impacts:	15	Estimated Total Cost:	\$4,629,088
Estimated ROW Cost:	\$1,134,000	Estimated CST Time:	18 Months
Rationale: The proposed alternative is similar in cost to the preferred alternative however the environmental impacts are greater.			

Additional Comments/ Information: The Department's new ICE Policy will be evaluated during the Preliminary Design.

LIST OF ATTACHMENTS/SUPPORTING DATA

1. Concept Layout
2. Typical Sections
3. Cost Estimates
4. Crash Summaries
5. Traffic Diagrams
6. Meeting Minutes
7. Bridge Inventory Report
8. MS4 Report



DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE P.I. No. 13746

OFFICE Roadway Design

PROJECT DESCRIPTION

This project will replace the existing State Route (SR) 385 bridge over Hazel Creek in Habersham County.

DATE September 20, 2017

From: Albert Shelby

To: Lisa L. Myers, State Project Review Engineer

Subject: REVISIONS TO PROGRAMMED COSTS

PROJECT MANAGER Darrell Richardson

MGMT LET DATE 11/15/2019

MGMT ROW DATE

PROGRAMMED COSTS (TPro W/OUT INFLATION)

LAST ESTIMATE UPDATE

CONSTRUCTION \$ 2,106,438.00

DATE

RIGHT OF WAY \$ 250,000.00

DATE

UTILITIES \$ 0.00

DATE

REVISED COST ESTIMATES

CONSTRUCTION* \$ 2,935,087.90

RIGHT OF WAY \$ 1,134,000.00

UTILITIES \$ 210,000.00

*Cost Contains 10 % Contingency

REASONS FOR COST INCREASE AND CONTINGENCY JUSTIFICATION:

CONTINGENCY SUMMARY

A. CONSTRUCTION COST ESTIMATE:	\$ 2,517,955.91	Base Estimate From CES	
B. ENGINEERING AND INSPECTION (E & I):	\$ 125,897.80	Base Estimate (A) x	5 %
C. CONTINGENCY:	\$ 264,385.37	Base Estimate (A) + E & I (B) x	10 %
		See % Table in "Risk Based Cost Estimation" Memo	
D. TOTAL LIQUID AC ADJUSTMENT:	\$ 26,848.83	Total From Liquid AC Spreadsheet	
E. CONSTRUCTION TOTAL:	\$ 2,935,087.90	(A + B + C + D = E)	

REIMBURSABLE UTILITY COSTS

UTILITY OWNER	REIMBURSABLE COST
Atlanta Gas Light	\$ -
City of Demorest Water	\$ -
City of Demorest Sewer	\$ -
Georgia Power Co - Distribution	\$ 210,000.00
Windstream (Telecomm)	\$ -
Windstream (CATV)	\$ -
TOTAL	\$ 210,000.00

ATTACHMENTS:

Detailed Cost Estimate Printout From TRAQS
Liquid AC Adjustment Spreadsheet

PROJ. NO. N/A
P.I. NO. 0013746
DATE 9/20/2017

CALL NO. 9/29/2009

INDEX (TYPE)	DATE	INDEX
REG. UNLEADED	Sep-17	\$ 2.508
DIESEL		\$ 2.607
LIQUID AC		\$ 361.00

Link to Fuel and AC Index:
<http://www.dot.ga.gov/PS/Materials/AsphaltFuelIndex>

LIQUID AC ADJUSTMENTS

PA=[((APM-APL)/APL)]xTMTxAPL

Asphalt

Price Adjustment (PA)					26414.37	\$	26,414.37
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	577.60			
Monthly Asphalt Cement Price month project let (APL)			\$	361.00			
Total Monthly Tonnage of asphalt cement (TMT)					121.95		

ASPHALT	Tons	%AC	AC ton
Leveling		5.0%	0
12.5 OGFC		5.0%	0
12.5 mm	385	5.0%	19.25
9.5 mm SP	0	5.0%	0
25 mm SP	1540	5.0%	77
19 mm SP	514	5.0%	25.7
	2439		121.95

BITUMINOUS TACK COAT

Price Adjustment (PA)					\$ 434.46	\$	434.46
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	577.60			
Monthly Asphalt Cement Price month project let (APL)			\$	361.00			
Total Monthly Tonnage of asphalt cement (TMT)					2.005812131		

Bitum Tack

Gals	gals/ton	tons
467	232.8234	2.00581213

BITUMINOUS TACK COAT (surface treatment)

Price Adjustment (PA)					0	\$	-
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	577.60			
Monthly Asphalt Cement Price month project let (APL)			\$	361.00			
Total Monthly Tonnage of asphalt cement (TMT)					0		

Bitum Tack	SY	Gals/SY	Gals	gals/ton	tons
Single Surf. Trmt.		0.20	0	232.8234	0
Double Surf. Trmt.		0.44	0	232.8234	0
Triple Surf. Trmt		0.71	0	232.8234	0

TOTAL LIQUID AC ADJUSTMENT \$ **26,848.83**

STATE HIGHWAY AGENCY

JOB ESTIMATE REPORT

JOB NUMBER : 0013746
DESCRIPTION: SR 385 @ HAZEL CREEK

SPEC YEAR: 13

ITEMS FOR JOB 0013746

LINE	ITEM	ALT	UNITS	DESCRIPTION	QUANTITY	PRICE	AMOUNT
0005	402-3130		TN	RECYL AC 12.5MM SP,GP2,BM&HL	385.000	107.73	41476.50
0010	402-3190		TN	RECYL AC 19 MM SP,GP 1 OR 2 ,INC BM&HL	514.000	88.53	45508.10
0015	402-3121		TN	RECYL AC 25MM SP,GP1/2,BM&HL	1540.000	78.89	121492.05
0030	433-1200		SY	REF CONC APPR SL/I SLOPED EDGE	290.000	188.11	54553.27
0035	641-1100		LF	GUARDRAIL, TP T	84.000	73.89	6207.09
0040	641-1200		LF	GUARDRAIL, TP W	780.000	19.06	14873.44
0045	641-5015		EACH	GUARDRL ANCHOR, TP 12A, 31 IN, TANG, E/A	4.000	3500.00	14000.00
0049	641-5001		EA	GUARDRAIL ANCHORAGE, TP 1	4.000	845.26	3381.07
0050	150-1000		LS	TRAFFIC CONTROL - PI# 0013746	1.000	50000.00	50000.00
0055	210-0100		LS	GRADING COMPLETE - PI# 0013746	1.000	250000.00	250000.00
0060	632-0003		EA	CHANGEABLE MESS SIGN,PORT,TP 3	1.000	9571.76	9571.77
0065	310-1101		TN	GR AGGR BASE CRS, INCL MATL	3248.000	29.62	96218.33
0070	634-1200		EA	RIGHT OF WAY MARKERS	10.000	129.81	1298.15
0075	543-9000		LS	CONSTR OF BRIDGE COMPLETE - PI#0013746	1.000	1386000.00	1386000.00
0080	540-1102		LS	REM OF EX BR, BR NO - PI#0013746	1.000	138600.00	138600.00
0095	550-1180		LF	STM DR PIPE 18,H 1-10	1280.000	45.88	58736.59
0100	653-1501		LF	THERMO SOLID TRAF ST 5 IN, WHI	2210.000	0.74	1645.26
0105	653-1502		LF	THERMO SOLID TRAF ST, 5 IN YEL	2210.000	0.74	1641.41
0108	653-3502		GLF	THERMO SKIP TRAF ST, 5 IN, YEL	2210.000	0.44	974.26
0109	657-1054		LF	PRF PL SD PVMT MKG,5,WH,TP PB	330.000	5.34	1764.65
0115	657-6054		LF	PRF PL SD PVMT MKG,5,YW,TP PB	330.000	5.60	1849.73
0116	657-8054		GLF	PRF PL SK PVMT MKG,5,YE,TP PB	330.000	3.80	1255.06
0117	653-0120		EA	THERM PVMT MARK, ARROW, TP 2	4.000	101.24	404.98
0118	657-5017		EA	PRF PL PVT MKG,ARW TP2,WH,TPPB	2.000	643.49	1286.98
0123	550-1240		LF	STM DR PIPE 24,H 1-10	50.000	69.21	3460.96
0128	668-1100		EA	CATCH BASIN, GP 1	8.000	2868.04	22944.36
0133	163-0232		AC	TEMPORARY GRASSING	2.000	724.11	1448.24
0138	163-0240		TN	MULCH	57.000	230.45	13135.68
0143	163-0300		EA	CONSTRUCTION EXIT	2.000	1544.00	3088.02
0148	163-0550		EA	CONS & REM INLET SEDIMENT TRAP	9.000	222.45	2002.08
0153	171-0030		LF	TEMPORARY SILT FENCE, TYPE C	5080.000	3.47	17643.86
0158	165-0030		LF	MAINT OF TEMP SILT FENCE, TP C	5080.000	0.66	3394.41
0163	165-0101		EA	MAINT OF CONST EXIT	2.000	534.04	1068.09
0168	165-0105		EA	MAINT OF INLET SEDIMENT TRAP	9.000	75.73	681.59
0173	167-1000		EA	WATER QUALITY MONITORING AND SAMPLING	2.000	422.85	845.72
0178	167-1500		MO	WATER QUALITY INSPECTIONS	18.000	643.54	11583.76
0183	550-4224		EA	FLARED END SECT 24 IN, ST DR	2.000	765.28	1530.57
0188	603-7000		SY	PLASTIC FILTER FABRIC	60.000	4.47	268.47
0193	603-2024		SY	STN DUMPED RIP RAP, TP 1, 24	30.000	73.71	2211.46
0198	603-2182		SY	STN DUMPED RIP RAP, TP 3, 24	30.000	56.80	1704.06
0203	643-8200		LF	BARRIER FENCE (ORANGE), 4 FT	2540.000	2.09	5323.89

STATE HIGHWAY AGENCY

DATE : 09/20/2017

PAGE : 2

JOB ESTIMATE REPORT

0208	700-6910	AC	PERMANENT GRASSING	3.000	1388.07	4164.24
0213	700-7000	TN	AGRICULTURAL LIME	7.000	96.24	673.74
0218	700-8000	TN	FERTILIZER MIXED GRADE	4.000	644.37	2577.50
0223	700-8100	LB	FERTILIZER NITROGEN CONTENT	158.000	2.87	453.57
0228	716-2000	SY	EROSION CONTROL MATS, SLOPES	30.000	2.80	84.03
0233	413-0750	GL	TACK COAT	467.000	3.01	1405.67
0238	636-1041	SF	HWY SIGNS,TP 2MAT,REFL SH TP 9	63.000	41.40	2608.70
0243	636-1033	SF	HWY SIGNS, TP1MAT,REFL SH TP 9	36.000	19.73	710.58
0248	636-2070	LF	GALV STEEL POSTS, TP 7	255.000	8.23	2099.34
0253	441-4030	SY	CONC VALLEY GUTTER, 8 IN	215.000	56.39	12124.26
0258	441-0104	SY	CONC SIDEWALK, 4 IN	1228.000	35.45	43544.55
0263	441-6222	LF	CONC CURB & GUTTER/ 8X30TP2	2090.000	25.08	52435.82

ITEM TOTAL

2517955.87

INFLATED ITEM TOTAL

2517955.87

TOTALS FOR JOB 0013746

ESTIMATED COST:

2517955.91

CONTINGENCY PERCENT (0.0):

0.00

ESTIMATED TOTAL:

2517955.91

GEORGIA DEPARTMENT OF TRANSPORTATION
PRELIMINARY ROW COST ESTIMATE SUMMARY

Date: 5/19/2017 Project:
Revised: County: Habersham
PI: 13746
Description: Bridge Replacement SR 385 @ Hazel Creek
Project Termini: 11/13/2019
Existing ROW: Varies
Parcels: 15 Required ROW: Varies

Land and Improvements \$633,000.00

Proximity Damage \$0.00

Consequential Damage \$100,000.00

Cost to Cures \$10,000.00

Trade Fixtures \$15,000.00

Improvements \$150,000.00

Valuation Services \$106,250.00

Legal Services \$122,625.00

Relocation \$73,750.00

Demolition \$63,000.00

Administrative \$135,000.00

TOTAL ESTIMATED COSTS \$1,133,625.00

TOTAL ESTIMATED COSTS (ROUNDED) \$1,134,000.00

Preparation Credits	Hours	Signature
Megan Dills 367057	40	Megan Dills

Prepared By:

Megan Dills

CG#:

5/19/2017

Approved By:

Kevin D. York

CG#:

261329

5/19/17

NOTE: No Market Appreciation is included in this Preliminary Cost Estimate

Eric K. Murray

6545

5/19/17
5/19/17

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE

Project No: n/a
County **Habersham**
P.I.# **0013746**

Office: **GAINESVILLE**
Date: **June 13, 2017**

Description: **SR 385 @ Hazel Creek in Demorest**

RO by JLP

FROM Robby Oliver, District Utilities Manager

TO Darrell Richardson, Project Manager

SUBJECT **PRELIMINARY UTILITY COST ESTIMATE**

A review of utilities located on the above referenced project has been conducted with Concept Layout plans. Listed below is a breakdown of the anticipated reimbursable and non-reimbursable cost.

<u>Utility Owner</u>	<u>Reimbursable</u>	<u>Non-Reimbursable</u>	<u>Estimate Based on</u>
Atlanta Gas Light	\$0.00	\$36,000.00	Site Visit / Available Drawings
City of Demorest Water **	\$0.00	\$48,700.00	Site Visit / Available Drawings
City of Demorest Sewer **	\$0.00	\$65,000.00	Site Visit / Available Drawings
Georgia Power Co - Distribution	\$210,000.00	\$0.00	Site Visit / Available Drawings
Windstream (Telecomm)	\$0.00	\$19,000.00	Site Visit / Available Drawings
Windstream (CATV)	\$0.00	\$16,000.00	Site Visit / Available Drawings
Total 100.00%	\$210,000.00	\$184,700.00	
Department Responsibility 100.00%	\$210,000.00		
Local Sponsor Responsibility 0.00%	\$0.00		PFA Dated N/A with N/A

** Indicates Potential Utility Aid Request from Local Gov't

Estimate is based on the best available information at the current stage, unforeseen prior rights information may be provided by the Utility Company at a later date that could cause some non-reimbursable costs to shift to the reimbursable cost column.

If additional information is needed, please contact Robby Oliver at 770-531-5772.

cc: Patrick Allen, State Utilities Administrator
Yulonda Pride-Forster, State Utilities Preconstruction Manager
Brandon Kirby, District Preconstruction Engineer
Matt Needham, Area Manager
File

SR 385 / US 441 BUS over Hazel Creek Bridge Replacement

Habersham County

P.I. Number: 0013746

Crash Summaries

Project Crash History:

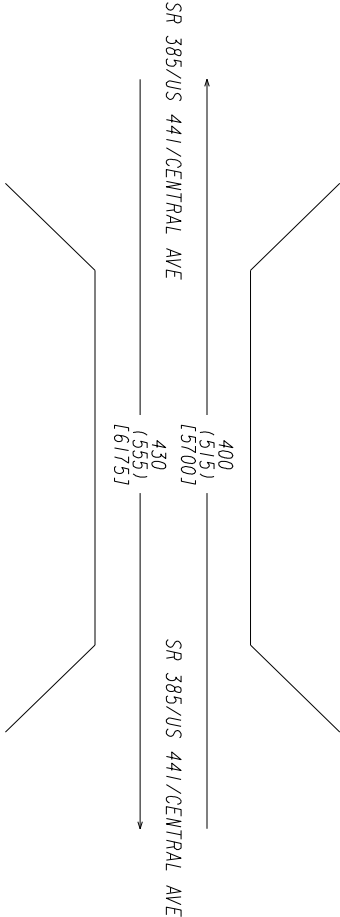
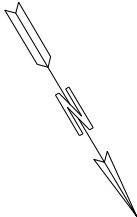
Year	No. Crashes	No. Vehicles	No. Injuries	No. Fatalities
2014	7	14	0	0
2015	4	8	0	0
2016	1	2	0	0
Total all years	12	24	4	0

Types of Crash:

Year	Sideswipe	Animal	Guard Rail	Fixed Object
2014	7	0	0	0
2015	4	0	0	0
2016	1	0	0	0
Total all years	12	0	0	0

SHEET 1 OF 5

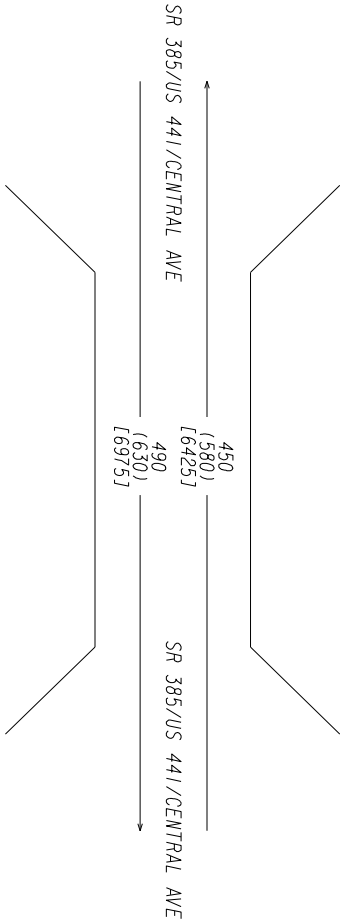
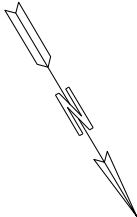
HABERSHAM COUNTY



P.L. # 0013746
HABERSHAM CO.
SR 385/US 441
OVER HAZEL CREEK
@ HABERSHAM CO.
AM PEAK HR DHV = XXX
PM PEAK HR DHV = (XXX)
AADT = (XXX)

SHEET 4 OF 5

HABERSHAM COUNTY



P.L. # 0013746
HABERSHAM CO.
SR 385/US 441
OVER HAZEL CREEK
@ HABERSHAM CO.
AM PEAK HR DHV = XXX
PM PEAK HR DHV = (XXX)
AADT = (XXXX)

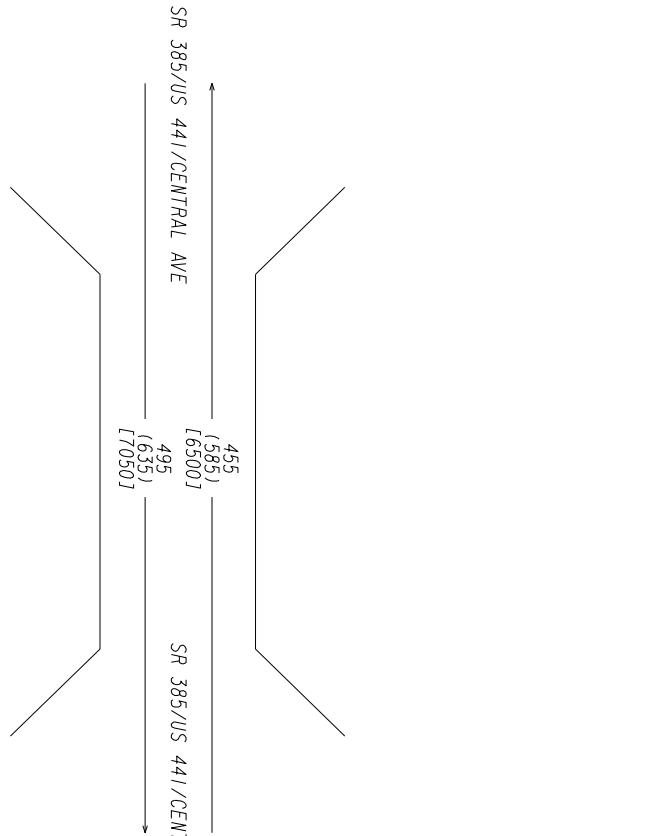
REVISION DATES		TRAFFIC DIAGRAM			
		SR 385/US 441/CENTRAL AVE AT HAZEL CREEK			
		DESIGNED	DATE	DRAWN	NO.
		BY	DATE	BY	
		CHECKED	DATE		
		APPROVED	DATE		



DESIGN YEAR (2042)

SHEET 5 OF 5

HABERSHAM COUNTY



REVISION DATES

DATE	DESCRIPTION

DESIGN YEAR + 2 (2044)

DESIGNED	DATE	DRIVING NO.

TRAFFIC DIAGRAM

SR 385/US 441/CENTRAL AVE
AT HAZEL CREEK

10-005

RS&H

P.L. # 0013746
HABERSHAM CO.
SR 385/US 441
OVER HAZEL CREEK
@ HABERSHAM CO.
AM PEAK HR DHV = XXX
PM PEAK HR DHV = (XXX)
AADT = (XXX)

Meeting Minutes

Project: PI No 0013746, SR 385 @ Hazel Creek

Subject: Concept Team Meeting

Date: May 31, 2017

Attendees: Darrell Richardson, OPD-AECOM/DPE, GDOT Project Manager (PM)
Galen Davis, Georgia Power
Mike Roberge, HEMC
Jill Brown, Edwards-Pitman
Zachary Adricerissens, GDOT-OES/Atkins
Matt Needham, GDOT Area Manager
Scott Frederick, Gainesville Area Manager
Lynn Palmer, GDOT D1 Utilities
Sue Anne Decker, D1 Traffic Operations
Joel Corntorau, GDOT- Engineering Services
Judi Braza, GDOT D1 R/W
Brandon Kirby, D1 Preconstruction
Dom Saulino, RS&H, Project PM
Mac Cranford, RS&H
Jin Liu, RS&H
Laura Piff, RS&H

Minutes Prepared by Laura Piff on June 2, 2017

Meeting Purpose

Discuss project concept, comments and risks.

Darrell Richardson opened the meeting and started introductions.

Mac Cranford presented the project and project layouts. Discussions were held concerning the following topics:

- Sue Anne Decker mentioned that sight distance for all of the Driveway along the project need to meet or exceed current standards.
- The existing signal at the intersection of SR 385 & Demorest Mt Airay Rd will remain unchanged as it is just off the project.
- The bridge will be widened from 56' to 74'.
- Mac mentioned that the bridge will be staged constructed by removing the newer widen bridge section to one side, build a 2 lane stage bridge, remove the rest of the existing bridge, and then complete the rest of the proposed bridge.
- This project is not on a designated bike route, but bike lanes will be added to the bridge to satisfy GDOT's Complete Streets Bike Warrant.
- Darrell suggested maybe go to 12' width center left turn lane on the bridge that was not favored by the District.

- Mac mentioned that the wider final bridge typical section helps with the bridge staging and reduces the overall mainline shift.
- Hair salon and car wash are potential displacements
- Environmental
 - Aquatic species are expected
 - There will be tree clearing restrictions for bats
 - Public involvement is expected to be held around September.
 - No historic or archaeological resources have been identified at this time
 - Field work not done yet
- Utility
 - The power line that runs down the left side of the project is directly behind the existing sidewalk
 - The Joint-use poles are about 10.5' from the edge of pavement.
 - They will need to be moved back in order to construct the bridge and there is no way to switch the circuits given the proximity to Piedmont College
 - The required offset from side of bridge to closest power line is 20'.
 - Georgia Power mentioned that they are probably on their own easement.
 - City of Demorest Water likely to ask for aid.
 - Utility estimate is about \$500k
- Brand Kirby request that the project team meet with local governments and ask about off system detours before PIOH and to consider the college and fire station w/ detour
- None of the driveways will be blocked by guardrail for the bridge warrants, but it was proposed to make the College Maintenance Facility SR drive an in only to improve access management along the SR.
- R/W acquisition: 15 parcels of acquisition will take 15 months at a cost of about \$1.2 mil
- Edwards-Pitman to determine what the drainage ditch on the southwest side of the bridge is classified as. They are waiting on a response from the GA EPD.
- Risks:
 - Design
 - Staging – cranes next to the power lines
 - Sight distance at driveways
 - Environmental
 - Special provisions for protected species could affect construction schedule.
 - Public involvement; potential pushback on off-site detour.

Meeting Subject: 0013746 SR 385 @ Hazel Creek Concept Team Meeting

Location: District 1 Office Gainesville

Time: 9:00 am

Date: May 31, 2017

SIGN-IN SHEET

Print Name		Phone	Email
Darrell Richardson	OPD-AECOM/DPE	678-730-1448	drichardson@dot.ga.gov
Mac Cranford	RS&H	678 528 7221	mac.cranford@rsandh.com
Dom Saulino	..	678-528-7219	dominic.saulino@rsandh.com
Laura Piff	RS&H	678 528 7223	laura.piff@rsandh.com
Galen Davis	Georgia Power	404 988 5876	gdavis@southernco.com
Mike Roberge	Hemc	231 675 8500	michael.Roberge@hemc.coop
Jill Brown	Edwards-Pitman	678-932-2226	jbrown@edwards-pitman.com
Zachary Adrienssens	GDOT-OES/Athias	404-985-9660	zadrienssens@dot.ga.gov
Matt Needham	GDOT Area Manager	706 348 4848	mneedham@dot.ga.gov
SCOTT FREDERICK	GAINESVILLE AREA MGR	574 678 630	sfrederick@dot.ga.gov
Jin Liu	RS & H	678-528-7216	jin.liu@rsandh.com
Lynn Palmer	GDOT DI Utilities	770-531-5752	lpalmer@dot.ga.gov
Sue Anne Decker	DITO	770-531-5800	sdecker@dot.ga.gov
Joel Cantorau	GDOT ES	678 209 9603	jcantorau@dot.ga.gov
Judi Braza	GDOT K/W	(770) 531-5787	jbaza@dot.ga.gov
Brandon Kirby	GDOT	678 343 0816	bkirby@dot.ga.gov

Bridge Inventory Data Listing Georgia Department of Transportation

Processed Date:3/28/2017

Parameters: Bridge Serial Number

Bridge Serial Number: 137-0006-0

Location & Geography		County: Habersham		SUFF. RATING: 63.1	
Structure ID:		218 Datum:	0- Not Applicable	Signs & Attachments	
137-0006-0		*19 Bypass Length:	3	225 Expansion Joint Type:	
				02- Open or sealed concrete joint (silicone sealant).	
200 Bridge Information:		*20 Toll:		242 Deck Drains:	
*6 Feature Intersected:		*21 Maintenance Responsibility:	3- On a Free Road or Non-Highway	243A Parapet Location:	
*7A Route Number Carried:		*22 Owner:	01-State Highway Agency.	243B Parapet Height:	
*7B Facility Carried:		*31 Design Load:	01-State Highway Agency.	243C Parapet Width:	
9 Location:		37 Historical Significance:	2- H 15	238A Curb Height:	
2 GDOT District:		205 Congressional District:	3- Possibly eligible for the National Register of Historic Places	238B Curb Material:	
*91 Inspection Frequency:		27 Year Constructed:	009	239A Handrail Left:	
92A Fracture Critical Insp. Freq:		106 Year Reconstructed:	1925	239B Handrail Right:	
92B Underwater Insp Freq:		33 Bridge Median:	1970	*240 Median Barrier Rail:	
92C Other Spec. Insp Freq:		34 Slew:	0-None	241A Bridge Median Height:	
*4 Place Code:		35 Structure Flared:	0	241B Bridge Median Width:	
*5A Inventory Route(O.U.):		38 Navigation Control:	No	*230A Guardrail Location Direction Rear:	
5B Route Type:		213 Special Steel Design:	0- Navigation is not controlled by an Agency	*230B Guardrail Location Direction Fwrd:	
5C Service Designation:		267A Type Paint Super Structure:	0- Not applicable or other	*230C Guardrail Location Opposing Rear:	
5D Route Number:		267B Type Paint Sub Structure:	0- Not Applicable. Year : 0000	*230D Guardrail Location Opposing Fwrd:	
5E Directional Suffix:		*42A Type of Service On:	5-Highway-Pedestrian	244 Approach Slab:	
*16 Latitude:		*42B Type of Service Under:	5-Waterway	224 Retaining Wall:	
*17 Longitude:		214A Movable Bridge:	0	233 Posted Speed Limit:	
98A Border Bridge:		214B Operator on Duty:	0	236 Warning Sign:	
99 ID Number:		203 Type Bridge:	A- Spread footing. O. Concrete O. Concrete O. Concrete	234 Delinicator:	
*100 STRAHNET:		259 Pile Encasement:	3	235 Hazard Boards:	
12 Base Highway Network:		*43A Structure Type Main material:	1-Concrete	237A Gas:	
13A LRS Inventory Route:		*43B Structure Type Main Type:	11-Arch - Deck	237B Water:	
13B Sub Inventory Route:		45 Number of Main Spans:	3	237C Electric:	
101 Parallel Structure:		44 Structure Type Approach:	A,0- Other B. 0- Other	237D Telephone:	
*102 Direction of Traffic:		46 Number of Approach Spans:	0	237E Sewer:	
*264 Road Inventory Mile Post:		226 Bridge Curve:	A. Vertical: YesB. Horizontal: No	247A Lighting: Street:	
*104 Highway System:		111 Pier Protection:	N - Navigation Control Item coded 0, or Feature not a waterway	247B Navigation:	
*26 Functional Classification:		107 Deck Structure Type:	1 - C-I-P Portland Cement Concrete - Epoxy Coated Rebars	247C Aerial:	
*204A Federal Route Type:		108A Wearing Surface Type:	6. Bituminous	*248 County Continuity No.:	
		S - Secondary.	0. None	36A Bridge Railings:	
*204B Federal Route Number:		108C Deck Protection:	8. Unknown	36B Transition:	
105 Federal Lands Highway:				36C Approach Guardrail:	
*110 Truck Route:		265 Underwater Inspection Area:	0	36D Approach Guardrail Ends:	
217 Benchmark Elevation:		0- The Feature is not part of the National Network for Trucks			
		0000.00			
* Location ID No:		137-00385D-002.33N			

02- Open or sealed concrete joint (silicone sealant).

1- Open Scuppers.

0- None present.

0.00

0.00

0.8

1- Concrete.

7- Aluminum.

7- Aluminum.

0- None.

0

0

3- Both sides.

3- Both sides.

0- None.

0- None.

3- Forward and Rear.

1- Cast-in-Place Concrete.

45

No

No

No

00- Not Applicable

00- Not Applicable

00- Not Applicable

00- Not Applicable

00- Not Applicable

No

No

No

15

2- Inspected feature meets acceptable construction date standards.

2- Inspected feature meets acceptable construction date standards.

1- Meets current standards

2- Inspected feature meets acceptable construction date standards.

Bridge Inventory Data Listing Georgia Department of Transportation

Processed Date:3/28/2017

Bridge Serial Number: 137-0006-0

County: Habersham

SUFF. RATING: 63.1

Programming Data				Measurements:				Ratings and Posting			
201 Project Number:	S-2640 (1)			*29 AADT:	11420			65 Inventory Rating Method:	2- Allowable Stress (AS)		
202 Plans Available:	4 Plans in Inchmage.			*30 AADT Year:	2011			63 Operating Rating Method:	2- Allowable Stress (AS)		
249 Proposed Project Number:	000000000000000000000000			109 % Truck Traffic:	1			66A Inventory Type:	2 - HS loading.		
250A Reconstruction Approval Status:	No			* 28A Lanes On:	2			66B Inventory Rating:	19		
250B Route Approval Status:	No			*28B Lanes Under:	0			64A Operating Type:	2 - HS loading.		
250C Approval Status Definition:	0			210A Tracks On:	00			64B Operating Rating:	41		
250D Approval Status Federal:	0			210B Tracks Under:	0			231 Calculated Loads			Posting Required
251 Project Identification Number:	0013746			* 48 Maximum Span Length:	55			231A H-Modified:	20	No	
252 Contract Date:	02/01/1901			*49 Structure Length:	165			231B Type3 Tandem:	28	No	
260 Seismic Number:	00009			51 Bridge Roadway Width:	43.800000000000004'			231C Timber:	36	No	
75A Type Work Proposed:	0- Not Applicable			52 Deck Width:	56.4'			231D HS-Modified:	25	No	
75B Work Done by:	0- Initial Inventory			* 47 Total Horizontal Clearance:	43.800000000000004'			231E Type 3S2:	40	No	
94 Bridge Improvement Cost: (X\$1,000)	\$645			50A Curb / Sidewalk Width Left:	5.0			231F Piggyback:	40	No	
95 Roadway Improvement Cost: (X\$1,000)	\$64			50B Curb / Sidewalk Width Right:	5.0			261 H Inventory Rating:	15		
96 Total Improvement Cost: (X\$1,000)	\$967			32 Approach Rdwy. Width:	26.0'			262 H Operating Rating:	33		
76 Improvement Length:	0.0'			*22a Approach Roadway				67 Structural Evaluation:	4		
97 Year Improvement Cost Based On:	2013			Rear Shoulder Left Width:	1.9			58 Deck Condition:	6 - Satisfactory Condition		
114 Future AADT:	17130										
115 Future AADT Year:	2031			Fwd Shoulder Left Width:	2.7			59 Superstructure Condition:	5 - Fair Condition		
				Rear Pavement Width:	33.3			* 227 Collision Damage:	5 - Fair Condition		
				Forward Pavement Width:	25.7			60A Substructure Condition:	7 - Good Condition		
				Intersection Rear:	1			60B Scour Condition:	N - Not Applicable		
								60C Underwater Condition:	9-Superior to present desirable criteria.		
								71 Waterway Adequacy:	8-Equal to present desirable criteria.		
Hydraulic Data				53 Minimum Vertical Clearance Over Rd:	99' 99"						
113 Scour Critical:	U No Load Rating: no scour critical data entered.			54A Under Reference Feature:	N- Feature not a highway or railroad.			61 Channel Protection Cond.:	6		
216A Water Depth:	1.6			54B Minimum Clearance Under:	0' 0"			68 Deck Geometry:	N		
216B Bridge Height:	28.4			*22b Minimum Vertical Clearance				69 UnderCl. Horiz/Vert:	7-Between 8 and 6		
222 Slope Protection:	1			228A Actual Odometer Direction:	9999"			72 Approach Alignment:	N - Not Applicable		
221A Spur Dike Rear:				228B Actual Opposing Direction:	9999"			62 Culvert:	5. Equal to or above legal loads		
221B Spur Dike Fwd:				228C Posted Odometer Direction:	00'00"			70 Bridge Posting Required:	A. Open, no restrction		
219 Fender System:	0- None.			228D Posted Opposing Direction:	00'00"			* 103 Temporary Structure:	No		
220 Dolphin:				55A Lateral Underclearance Reference:	N- Feature not a highway or railroad.			232 Posted Loads			
223A Culvert Cover:	000			55B Lateral Underclearance on Right:	0.0			232A H-Modified:	00		
223B Culvert Type:	0- Not Applicable			56 Lateral Underclearance on Left:	0.0			232B Type3 Tandem:	00		
223C Number of Barrels:	0			10A Direction of Travel for Max Min:	0			232C Timber:	00		
223D Barrel Width:	0.0			10B Max Min Vertical Clearance:	9999"			232D HS-Modified:	00		
223E Barrel Height:	0.0			245A Deck Thickness Main:	6.6			232E Type 3s2:	00		
223F Culvert Length:	0.0			245B Deck Thickness Approach:	0.0			232F Piggyback:	00		
223G Culvert Apert:	0			246 Overlay Thickness:	6			253 Notification Date:	02/01/1901		
39 Navigation Vertical Clearance:	0'							258 Federal Notify Date:	02/01/1901		
40 Navigation Horizontal Clearance:	0										
116 Navigation Vertical Clear Closed:	0										

MS4 Concept Report Summary

Attach the following checklist information to the Concept Report Template:

Is there a Project Level Exclusion that applies to this project: ☐ No ☒ Yes

If yes, please indicate which of the following exclusions apply:

- ☐ Roadways that are not owned or operated (maintained) by GDOT may not require post-construction BMPs. Coordinate with the appropriate local government or entity to determine stormwater management requirements.
 - ☒ The project location is not within a designated MS4 area.
 - ☐ Maintenance and safety improvement projects whereby the sites are not connected and disturbs less than one acre at each individual site. This includes projects such as repaving, shoulder building, fiber optic line installation, sign addition, and sound barrier installation.
 - ☐ Projects that have their environmental documents approved or right-of-way plans submitted for approval on or before June 30th, 2012.
 - ☐ Road projects that disturb less than 1 acre or for site development projects that add less than 5,000 ft² of impervious area.
-